

# **DOE Pre-Proposal Site Tour**



## **Paducah Gaseous Diffusion Plant (PGDP) Infrastructure Support Services**

# Site History/Key Facts

19477319

## The Paducah Sun-Democrat

Paducah, Ky., Friday Evening, December 15, 1950

Report: High 45, Low 25  
 Temp: High 45, Low 25  
 Wind: Light breeze  
 Clouds: Partly cloudy  
 Rain: None  
 Bar: 30.1  
 Humidity: 75%  
 Sunrise: 7:22 A. M.  
 Sunset: 5:12 P. M.

4 Editions Daily—2 Sunday

### AEC To Build A-Plant At KOW Site

**Chinese Reds Drive Into UN Beachhead**  
 Activity Expected On Northwest Front

PORTLAND, December 15.—(AP)—Chinese Red forces entered only Korean territory, says the Washington-Bureau editorial from its northwest Korea press, urged by a meeting held at Washington last night. The editorial said that the Chinese Red forces were expected to drive into the UN beachhead.



**Building Force Of 10,000 May Be Required**

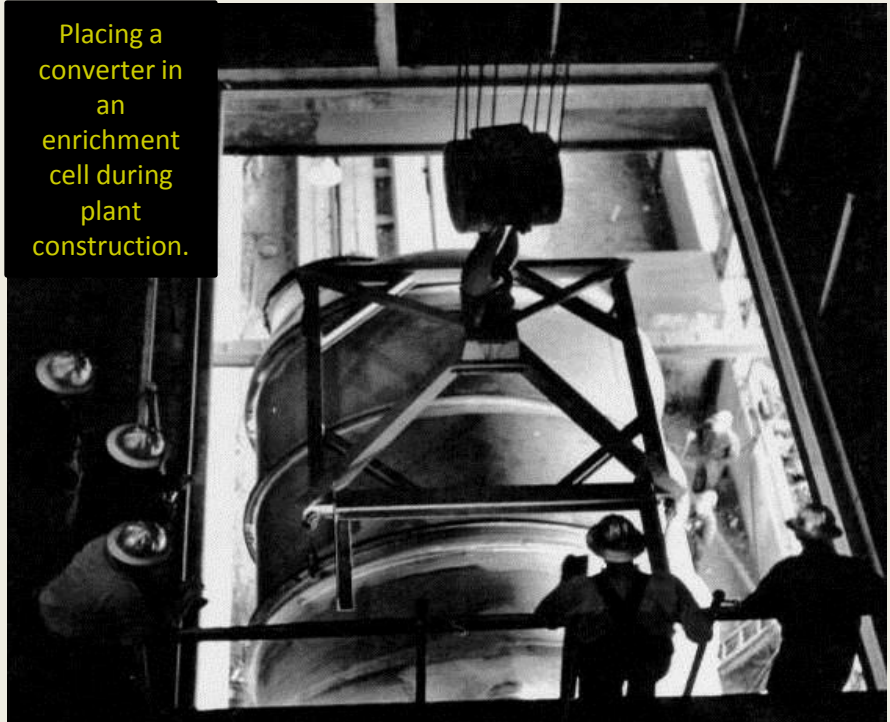
**Cost Set At \$500,000,000; 1,600 Permanent Jobs Expected**

The Atomic Energy Commission officially announced today that it will build a huge new plant at Kentucky Ordnance Works near Paducah.

The House appropriations committee disclosed at about the same time that the project is expected to cost \$500,000,000. The committee has been considering funds for a \$1,050,000,000 expansion program for atomic production facilities, of which the Paducah plant will be a part.

The AEC said the Kentucky site will cover about 5,000 acres. "A considerable part of which will be obtained through purchase," around the present Kentucky Ordnance Works, 15 miles west of Paducah.

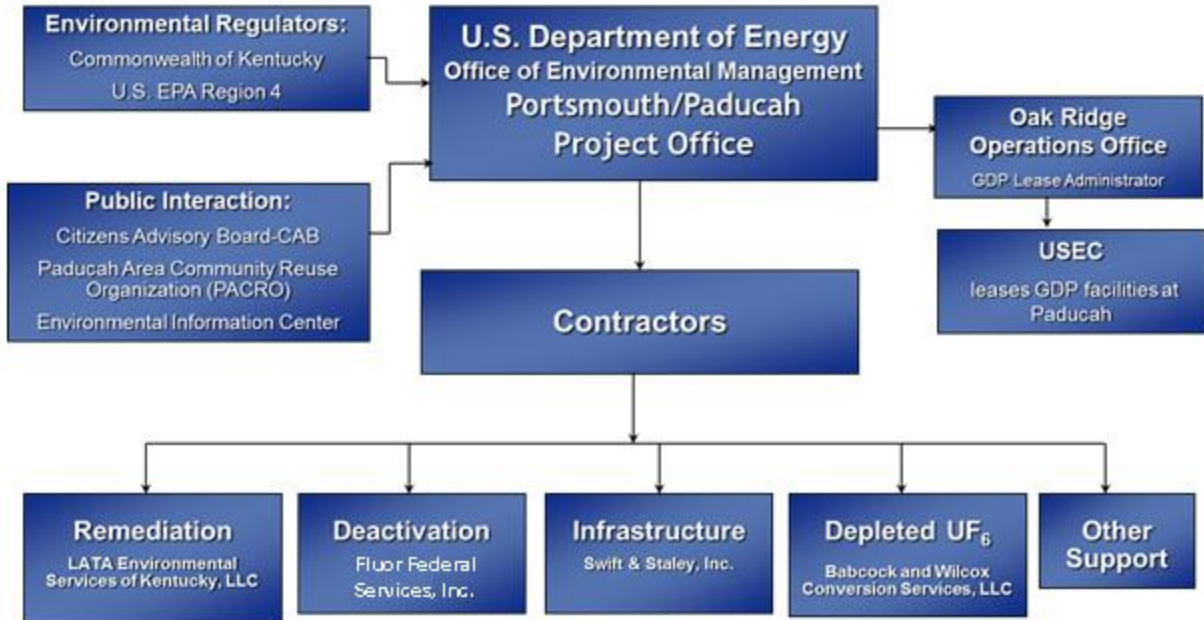
Placing a converter in an enrichment cell during plant construction.



In 1950, the Atomic Energy Commission selected the former Kentucky Ordnance Works site for the second of three planned uranium enrichment plants.

Construction began in 1951. The first product was shipped in 1952.

# Paducah Site Interfaces



- DOE contracted with a Fluor Federal Services, Inc. to perform GDP activities upon release from USEC.
- DOE will continue environmental remediation activities utilizing the current remediation contractor and then transfer those responsibilities to the Deactivation Contractor upon expiration of the current Remediation contract.
- DOE continues to operate the deleted uranium hexafluoride facility to process uranium tails.
- DOE will utilize the Infrastructure Support Services contractor for general site services.



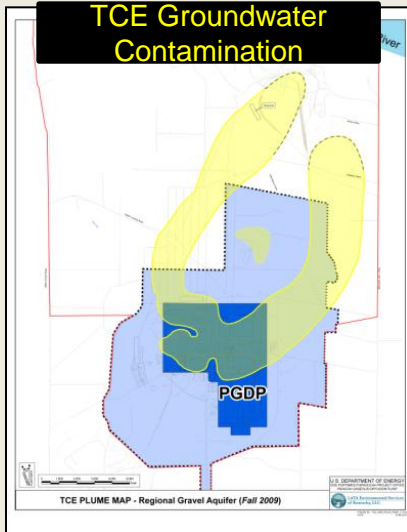
# Paducah Site DOE Missions

## Depleted Uranium Hexafluoride Plant



- ✓ Owner/landlord
- ✓ Environmental cleanup
- ✓ Disposal of legacy waste
- ✓ D&D of surplus facilities
- ✓ Storage and conversion of  $\text{DUF}_6$
- ✓ Deactivation of formerly leased gaseous diffusion plant facilities.

## TCE Groundwater Contamination



## Environmental Cleanup



## Firing Range Removal Action



## Offsite Waste Shipment



## D&D of an Inactive Facility

# DOE Pre-proposal Site Tour

The Facilities to be toured are a sample of the types of facilities that the Infrastructure Support Services Contractor will have Operational, Surveillance and Maintenance, Janitorial, Grounds and Pest Control responsibilities.

Additionally, the facilities combined with the narrative are representative of the types of general responsibilities the Infrastructure Support Services Contractor will have at the Paducah Gaseous Diffusion Plant.

# Facilities To Be Toured

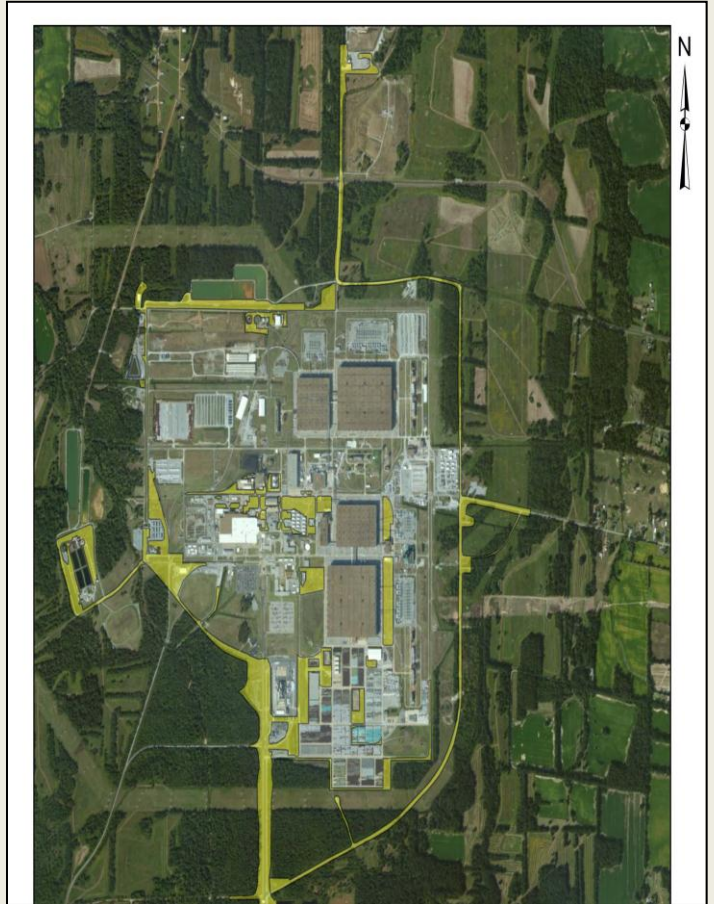
Stop Number	Facility Identification Number	Operationally Responsible	S&M	Janitorial	Pest Control	Grounds Service	Facility Type	Gross Sq.ft. – or Acreage as Specified	Office / Conf. Rooms Sq.ft.	Restroom Sq. ft. (number of restrooms)
1	C-100-T05	DEA	DEA	INF	INF	INF	Trailer - Office	1,440	1,440	128 (2)
2	C-100-T08	DEA	DEA	INF	INF	INF	Trailer - FOCI Office and Change House	1,440	105	128 (2)
3	C-102	DEA	DEA	INF	INF	INF	Building - Hospital	11,666	7,288	915 (2)
4	<b>C-100 (All areas except vaults and computing)</b>	DEA	INF	INF	INF	INF	Building - Administration	96,819	40,687	2,392 (9)
4	<b>C-100 (Vaults and Computing)</b>	INF	INF	INF	INF	INF	Building - Administration	5,208	N/A	N/A
5	C-101	INF	INF	INF	INF	INF	Building - Cafeteria	18,326	1,429	682 (2)
6	C-102-T01	DEA	DEA	INF	INF	INF	Trailer - Office	1,440	1,592	128 (2)
7	C-212-U	INF	INF	INF	INF	INF	Building - Utility Operations Office	1,715	823	85 (2)
8	C-212	DEA	DEA	INF	INF	INF	Building - Office	3,471	1,837	126 (2)
9	C-801	INF	INF	INF	INF	INF	Building - Communications Building	1,080	N/A	N/A
10	C-212-A	DEA	DEA	INF	INF	INF	Building - Gate 15	280	453	101 (2)
11	C-224	DEA	DEA	INF	INF	INF	Building - Post 15	1,680	1,631	49 (1)
12	C-202	DEA	DEA	INF	INF	INF	Building - Guard Training	3,446	576	N/A

# Facilities To Be Toured

Stop Number	Facility Identification Number	Operationally Responsible	S&M	Janitorial	Pest Control	Grounds Service	Facility Type	Gross Sq.ft. – or Acreage as Specified	Office / Conf. Rooms Sq.ft.	Restroom Sq. ft. (number of restrooms)
13	C-200	DEA	DEA	INF	INF	INF	Building - Guard and Fire Headquarters	19,490	6,129	3,277 (4)
14	C-200-A	DEA	DEA	INF	INF	INF	Building	1,600	1,408	56 (1)
15	C-205	DEA	DEA	INF	INF	INF	Building - Respirator Issue Bldg	4,100	720	1
16	C-750	INF	INF	INF	INF	INF	Building	11,866	285	358 (2)
17	C-710	DEA	DEA	INF	INF	INF	Building - Gas Manifold	84,333	15,862	2,057 (4)
18	C-709	DEA	DEA	INF	INF	INF	Building - Plant Laboratory Annex	33,000	N/A	416 (2)
19	C-412-T02	REM	REM	INF	INF	INF	Trailer - Office	1,440	1,314	126 (2)
20	C-412-T10	REM	REM	INF	INF	INF	Trailer - Break	1,440	1,314	126 (2)
21	C-412-T12	REM	REM	INF	INF	INF	Trailer - Shower & Change	1,440	N/A	1,440 (2)
22	C-310	DEA	DEA	INF	INF	INF	Building - Purge and Product Building	112,240	2,418	306 (2)
23	C-302	DEA	DEA	INF	INF	INF	Building - Operations Division Data Center	7,366	6,494	189 (2)
24	C-300	DEA	DEA	INF	INF	INF	Building - Central Control	16,022	2,272	216 (2)
25	C-304	DEA	DEA	INF	INF	INF	Building - Training and Cascade Office Building	8,000	4,086	256 (2)

## Mowing Zone II

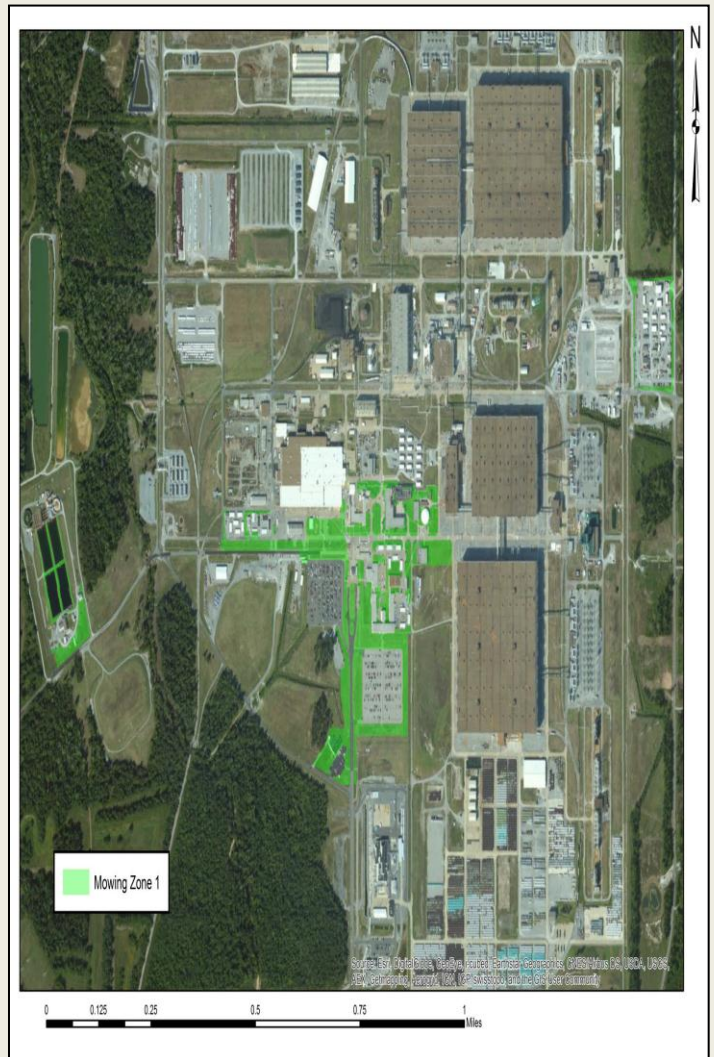
Mowing Zone II provides the service level for vegetation control for semi-improved grounds (e.g., adjacent to surfaced roads, unpaved roads). The vegetation/grass within this zone shall be maintained to a height of twelve (12") inches for non-radiological areas, or a height of thirty-six (36") inches or less for radiological areas.





## Mowing Zone I

Mowing Zone I provides the service level for vegetation control and grounds maintenance to areas that are adjacent to highly utilized facilities as related to administrative buildings/parking areas etc. These areas contain landscaping, ornamental trees shrubs, beds and other landscaping features and as such are provided the highest level of maintenance. The grass/vegetation within this zone shall be maintained to a height of six (6") inches or less.



# C-802-A Meteorological Communications Building

C-802-A Meteorological Communication Building provides communication tower services for the plant. The Contactor shall maintain the Federal Communication Commission radio frequency license.

The Contractor shall perform surveillance and maintenance, janitorial, pest control and grounds services.



## C-800 Motorcycle Parking Area

The C-800 Motorcycle Parking shelter is on the right, limited janitorial in the form of trash can service.



# C-100-T05 Office Trailer

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, conference, and break areas. No restrooms in this trailer or the two additional trailers.

The rock surrounding the trailers requires vegetation control (via the mowing schedule).



# C-100-T08 Office Trailer

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial areas include: office space and change areas. This is a single wide trailer, no water or restrooms.

The rock surrounding the trailers requires vegetation control (via the mowing schedule).





# C-102 Hospital

Along with multiple offices, there are three small restrooms in the C-102 facility.

A full basement exists beneath C-100/C-101/C-102 Complex requiring pest control services.

The Contractor shall perform janitorial, pest control and grounds services for C-102.

Janitorial areas include: office space, restrooms, break areas, sinks, exam rooms, emergency rooms, decontamination room and biohazards.



# C-100 Office Building

The C-100 Administrative Building consists of numerous offices and conference rooms and two fireproof vaults. The building is constructed of reinforced concrete. The facility is equipped with an elevator.



The Contractor shall perform surveillance and maintenance, janitorial, pest control and grounds services for C-100.



## C-100 Office Building (continued)

Janitorial areas include: office space, large hallways, conference rooms, 9 restrooms, break areas, vaults, and an elevator.

Janitorial supplies are currently kept in the basement.



# C-101 Cafeteria

The Contractor shall perform surveillance and maintenance, janitorial, pest control and grounds services for C-101.

Janitorial areas include: a large conference room, office space and a large break area. The meal preparation area (currently out of service) has two small change rooms and two small restrooms on the west side.

The two large restrooms (located on the north end of the building) are permanently out of service.





## C-102-T01 Office Trailer

C-102 Office Trailers Complex consists of 9 trailers.

C-102-T01 Office Trailer - The Contractor shall perform janitorial, pest control and grounds services for these facilities.

Janitorial areas include: office space, 2 restrooms, and a break area.



# C-212-U Office Building

The Contractor shall have operational responsibility, surveillance and maintenance responsibility and provide janitorial, pest control and grounds services for C-212-U.



Janitorial areas include: office space, 2 restrooms, and a break area.



## **C-212 Utility and HP Office Area**

The Contractor shall perform janitorial, pest control and grounds services for C-212.

Janitorial areas include: office space, 2 restrooms, and a break area.



## **C-801 Bus Shelter**

The Contractor shall have operational responsibility, surveillance and maintenance responsibility and provide janitorial, pest control and grounds services for C-801.

Janitorial includes waste receptacles in the open shelter and cleaning of the enclosed waiting area. No restrooms.



## C-212-A Office Building

The Contractor shall perform janitorial, pest control and grounds services for C-212-A.

Janitorial areas include office space, and 2 restrooms. An exercise facility is located on the south side.





## C-224 (Post 15) Security Post

The Contractor shall perform janitorial, pest control and grounds services for C-224 (Post 15) Security Post.

Janitorial areas include: office space, waiting area, and one restroom.



This facility is similar to C-225 (Post 48). Post 48 requires Surveillance and Maintenance, Post 15 does not.



# C-202 Training Room

The Contractor shall perform janitorial, pest control and grounds services for C-202 Training Room.

Janitorial area includes: open floor plan training area. No restrooms. Other than the foyer, no janitorial in the shooting range area.

Mowing Zone 1 surrounds the C-200 Area.



# C-200 Protective Force and Fire Headquarters Building

C-200 is constructed of reinforced concrete with 19,490 square feet of floor space. It contains offices, two conference rooms, a firing range and bays for emergency vehicles.

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, hallways, 4 restrooms, shower facilities, and 2 break areas.



## C-200-A Annex Trailer

C-200 –A  
Technical Security  
and Emergency  
Preparedness  
Trailer.

The Contractor  
shall perform  
janitorial, pest  
control and  
grounds services.

Janitorial area  
includes: office  
space and one  
restroom.





# C-205 Office Building

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, one restroom, and training room.





# C-750 Garage

The Contractor shall have operational responsibility, surveillance and maintenance responsibility and provide janitorial, pest control and grounds services for C-750 Garage.



Janitorial area includes: office space, 2 restrooms, and break area.



# C-710 Technical Services

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, four restrooms (including shower facility), conference rooms, and break areas. Many of the rooms have lab related workspace only. These do not require janitorial.



# C-709 Plant Laboratory Annex

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, and two restrooms. Most of the rooms have lab related workspace only. These do not require janitorial. Facility has 5,850 square feet of hallway and 320 square feet of stairwell.



## C-412-T02 Office Trailer

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, and two restrooms.



## C-412-T10 Break Trailer

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: large open break area.



## C-412-T12 D&D/DMSA Support Trailer

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: two large restrooms having shower and change facilities.





# C-310 Purge and Product Building

C-310 Purge and Product Building is a two story building that extracts “lite gases” and enriched uranium produced by the plant.

The building has an approximate thirteen (13)-acre footprint with the rail connector.

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, “At the Controls Area”, and two restrooms.



# C-302 Operations Division Data Center

The Central Control Facility monitors, coordinates, and/or control critical plant processes, power distribution, utilities, communications, plant alarms, and emergency operations.



The Contractor shall perform janitorial, pest control and grounds services.

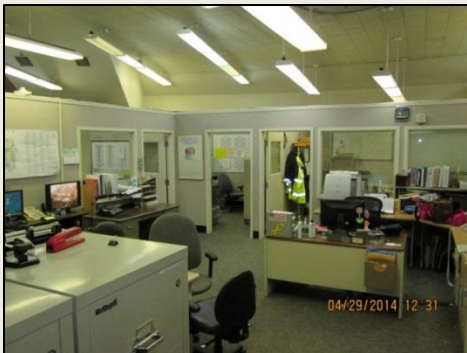
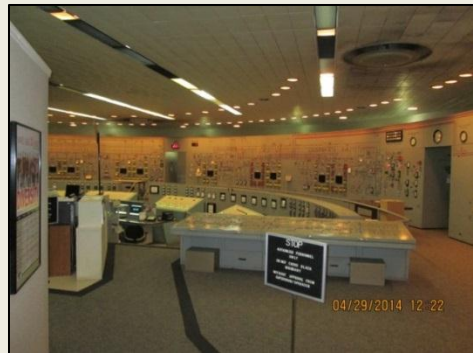
Janitorial area includes:  
office space, two restrooms,  
conference rooms, and break  
areas.



# C-300 Central Control Building

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, two restrooms, conference rooms, and “At the Controls Areas” (for Cascade Coordinator and Power Pit).



# C-304 Training and Cascade Office Building

The Contractor shall perform janitorial, pest control and grounds services.

Janitorial area includes: office space, two restrooms, two training rooms, a conference room and a kitchen/break area.

Mowing Zone I directly in front and to the east of the building. Mowing Zone II is directly south of the building, to the fence line.



# Facilities To Be Toured

Stop Number	Facility Identification Number	Operationally Responsible	S&M	Janitorial	Pest Control	Grounds Service	Facility Type	Gross Sq.ft. – or Acreage as Specified	Office / Conf. Rooms Sq.ft.	Restroom Sq. ft. (number of restrooms)
1	C-103	INF	INF	INF	INF	INF	Building - DOE Office	7,435	7,313	122 (2)
1	C-103 Annex	INF	INF	INF	INF	INF	Building	3,264	3,064	200 (2)
2	C-333	DEA	DEA	INF	INF	INF	Building - Process Building	2,130,120	1,463	2,166 (5)
3	C-532	DEA	DEA	INF	INF	INF	Building - Relay House	7,784	1,579	311 (2)
4	C-315	DEA	DEA	INF	INF	INF	Building - Surge and Waste Building	16,040	551	248 (2)
5	C-400	DEA	DEA	INF	INF	INF	Building - Groundwater Treatment System	116,140	3,554	1,235 (4)
6	C-409	DEA	DEA	INF	INF	INF	Building - Stabilization Building	26,797	732	953 (2)
7	C-600	DEA	DEA	INF	INF	INF	Building - Steam Plant	47,424	320	384 (2)
8	C-720	DEA	DEA	INF	INF	INF	Building - Machine Shop Addition	299,944	22,705	4,411(10)
9	C-720-E	DEA	DEA	INF	INF	INF	Building - Warehouse	3,467	N/A	3,154 (1)
10	C-743	DEA	DEA	INF	INF	INF	Building	9,973	8,086	614 (2)
11	C-757	DEA	DEA	INF	INF	INF	Building - Solid and LL Waste Processing	10,000	200	224 (2)
12	C-360	DEA	DEA	INF	INF	INF	Building - Toll Transfer and Sampling	17,800	1,276	485(2)
13	C-611-H	DEA	DEA	INF	INF	INF	Building - Filter and Pump Station	13,067	N/A	21 (1)
14	C-746-U	REM	REM	N/A	INF	INF	Landfill	60 acres	N/A	N/A



# C-103 DOE Site Office and Annex

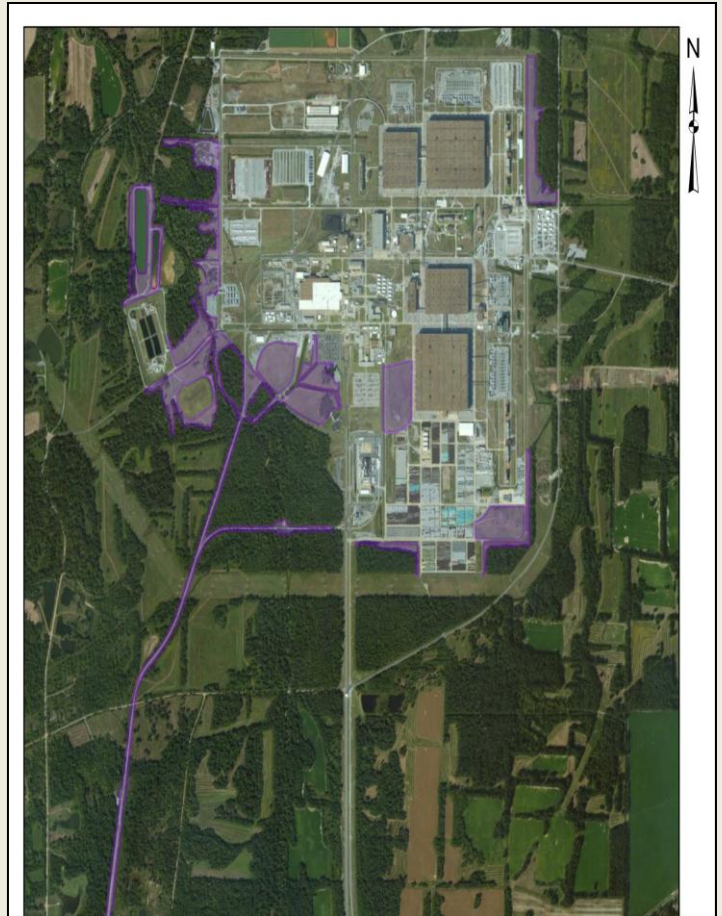
The Contractor shall have operational responsibility, surveillance and maintenance responsibility and provide janitorial, pest control and grounds services for C-103 DOE Site Office and Annex.



# Mowing Zone VI

Mowing Zone VI –  
This designation  
provides the service  
level of vegetation  
control to generally  
unimproved grounds  
where control of  
undergrowth is desired.

This zone shall be  
mowed on an annual  
basis to prevent woody  
growth.



## C-333 Process Building

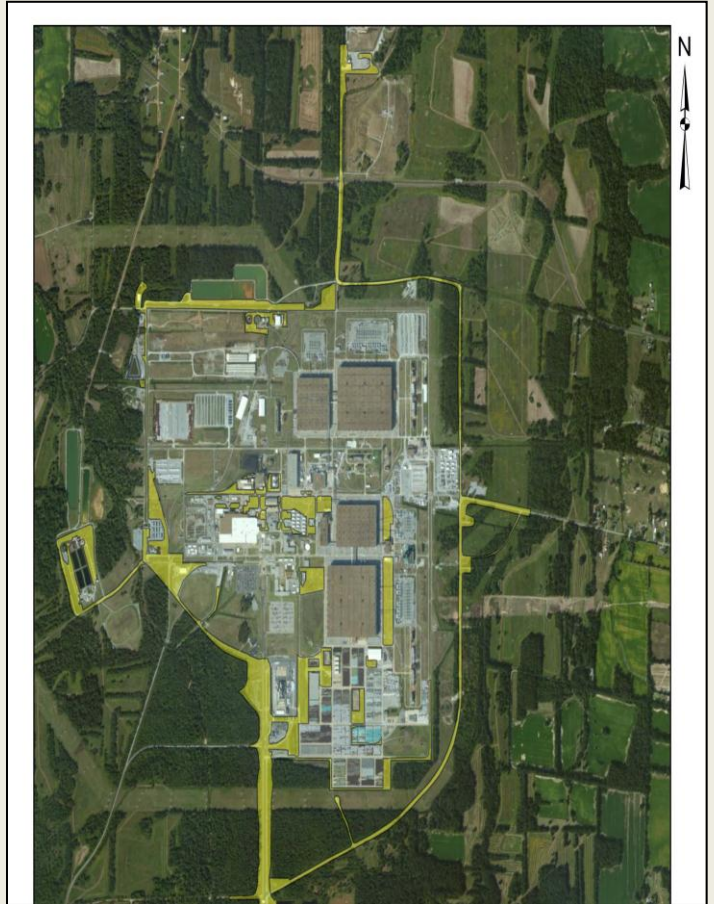
The Contractor shall perform janitorial, pest control and grounds services.



## Mowing Zone II

Mowing Zone II provides the service level for vegetation control for semi-improved grounds (e.g., adjacent to surfaced roads, unpaved roads).

The vegetation/grass within this zone shall be maintained to a height of twelve (12") inches for non-radiological areas, or a height of thirty-six (36") inches or less for radiological areas.

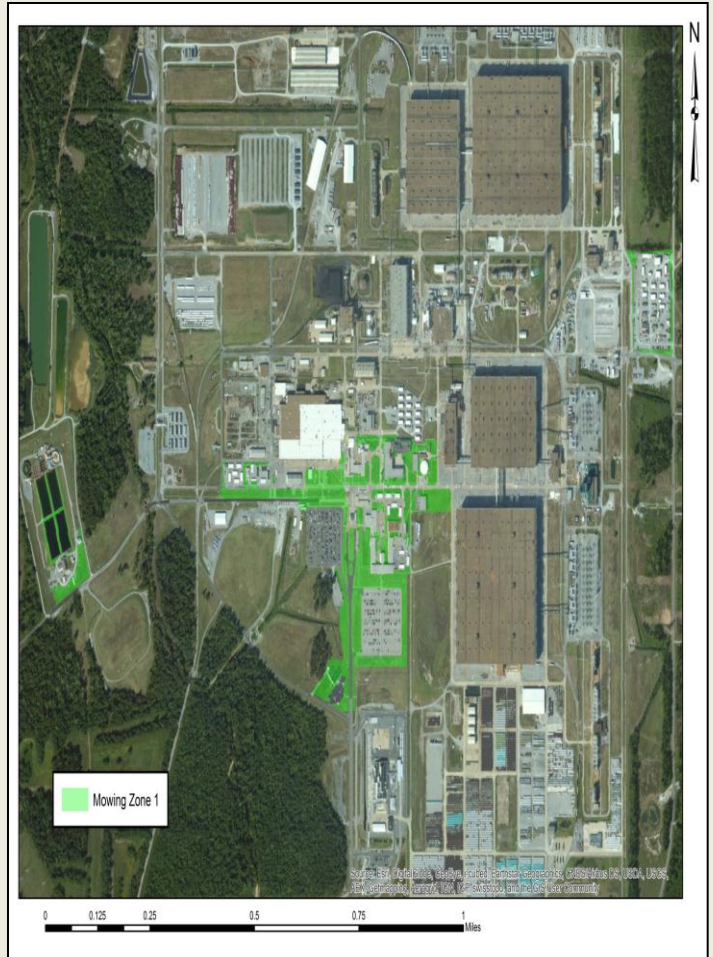




## Mowing Zone I

Mowing Zone I provides the service level for vegetation control and grounds maintenance to areas that are adjacent to highly utilized facilities as related to administrative buildings/parking areas etc. These areas contain landscaping, ornamental trees shrubs, beds and other landscaping features and as such are provided the highest level of maintenance.

The grass/vegetation within this zone shall be maintained to a height of six (6") inches or less.

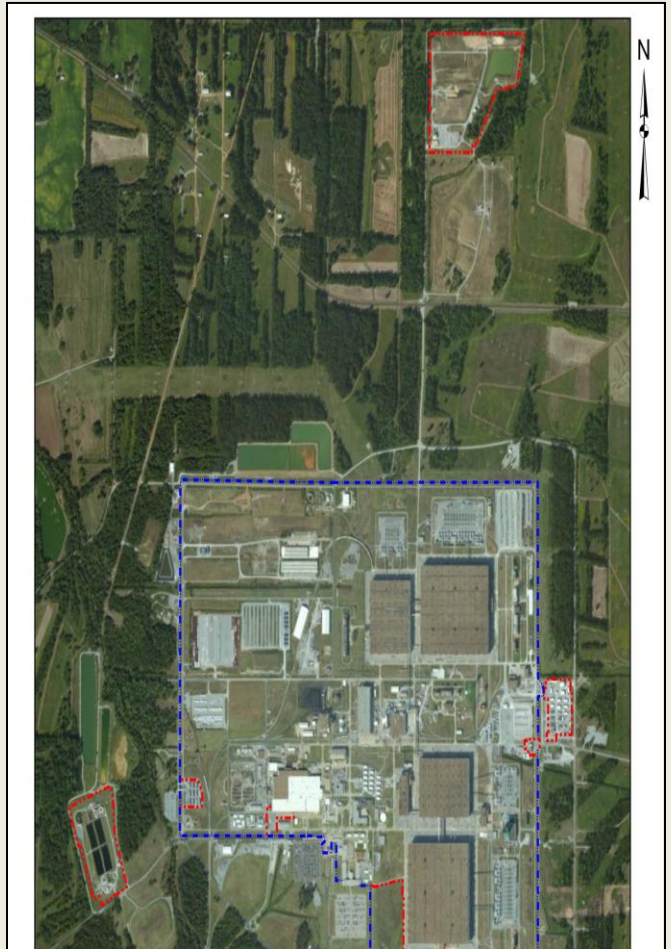




# Mowing Zone VII

Mowing Zone VII – This designation provides the service level of vegetation control for chain link fences. Fence lines must be kept clear of vegetation, trash, equipment, and other objects that could impede observation or facilitate bridging.

The Contractor shall maintain the grass/vegetation on the outside of the fence to a height of twelve (12") inches or less to create a clearance of approximately fifty (50') feet from the exterior of the fence to the surrounding tree line, subject to the limitations of the terrain.



This page was intentionally left blank.

## Mowing Zone III

Mowing Zone III – This designation provides the service level of vegetation control for semi-improved grounds.

The Contractor shall mow the vegetation/grass at a frequency of no less than every 30 calendar days to maintain vegetation /grass at a height of eighteen (18”) inches or less.



## **C-532 Relay House**

The Contractor shall perform janitorial, pest control and grounds services.



## **C-315 Tails Withdrawal**

The Contractor shall perform janitorial, pest control and grounds services.



# C-400 Cleaning Facility

The C-400 Chemical Operations Facility provides cleaning and decontamination services for the plant. It has a floor area of 116,140 square feet. Equipment removed from the process buildings for repair is cleaned here prior to being moved to the maintenance facility. Cylinders are also cleaned and tested at this facility. The Chemical Operations Facility also houses the plant's laundry which cleans and mends more than 3,000 pairs of coveralls each week.

The Contractor shall perform janitorial, pest control and grounds services.





# C-409 Stabilization Building

The Contractor shall perform janitorial, pest control and grounds services.



# C-600 Utilities Steam Plant

The C-600 Steam Plant provides steam, a portion of the compressed air, nitrogen, and chilled water utilized at the Paducah Site. It consists of three water wall tube boilers (two coal-fired and one oil-and gas-fired) each capable of producing 100,000 pounds of steam per hour at 250 pounds per square inch plus associated equipment. Some of the site facilities such as C-100, C-300, and C-710 currently utilize the chilled water system for building air conditioning and the steam for heating. C-600 is constructed of structural steel with corrugated siding with 47,424 square feet of floor space.



The Contractor shall perform janitorial, pest control and grounds services.

# C-720 Maintenance and Stores Building

C-720 Maintenance and Stores Building is primarily a maintenance area containing both high bay and low bay areas. The facility also contains offices, conference rooms, large storage areas, maintenance shops and loading docks. C-720 is constructed of structural steel with corrugated siding and has 336,498 square feet of floor space.



Almost every industrial craft is represented here, including machining, forming, welding, heat treating, electronics, painting, carpentry, and plumbing. The crafts housed in this building have the capability to fabricate, repair, maintain, and calibrate almost every piece of equipment essential to the operation of the plant.



The high bay portion of the facility contains metal fabrication and machining equipment; overhead crane bays; electrical motor facilities which include support equipment; climate controlled shop areas for precision work; electronic repair facilities; and paint spraying facilities.

The Contractor shall perform janitorial, pest control and grounds services.

## C-720-E Change House

The Contractor shall perform janitorial, pest control and grounds services.



## C-743 Office Building

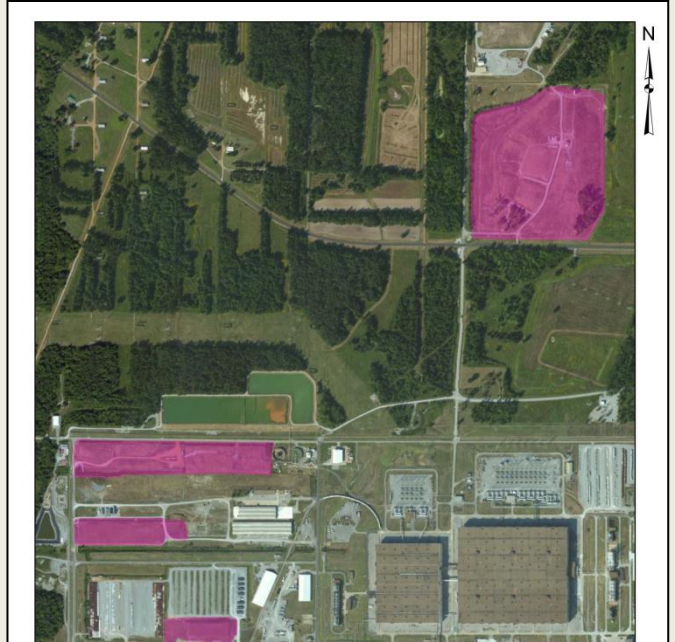
The Contractor shall perform janitorial, pest control and grounds services.



# Mowing Zone IV

Mowing Zone IV – This designation provides the service level of vegetation control to Regulated Engineered Facilities in accordance with the standards established within enforceable regulatory agreements between the Government and the State of Kentucky.

The Contractor shall mow the vegetation/grass at a frequency of no less than every 30 calendar days to maintain vegetation /grass at a height of eighteen (18”) inches or less.





# C-757 Solid and LL Waste Processing

The Contractor shall perform janitorial, pest control and grounds services.



# C-360 Toll Transfer and Sampling

The C-360 Toll Transfer and Sampling Facility provides systems for receiving, sampling, transferring and shipping cylinders containing  $UF_6$ . This facility provides all operations necessary for fulfilling enrichment service contracts for private industry.



The Contractor shall perform janitorial, pest control and grounds services.

# C-611-H Filter and Pump Station

The Contractor shall perform janitorial, pest control and grounds services.



## Mowing Zone V

Mowing Zone V – This designation provides the service level of vegetation control for specific areas.

This zone shall be mowed on an bi-annual basis to prevent woody growth.



# C-746-U: Site Landfills



Landfill Operations

The C-746-U Solid Waste Contained Landfill is the only operating disposal site at the Paducah plant. It opened in 1997 and has helped DOE reduce disposal costs by accepting certain types of waste: sanitary waste, soil and debris and industrial waste. No hazardous is accepted; however, waste with small amounts of radioactivity within the landfill's Authorized Limits is acceptable. No radioactive waste above Authorized Limits is accepted.

The Contractor shall perform janitorial, pest control and grounds services.



C-746-U Solid Waste Contained Landfill

# DOE Pre-Proposal Site Tour

Thank you for visiting

